Fig.1.

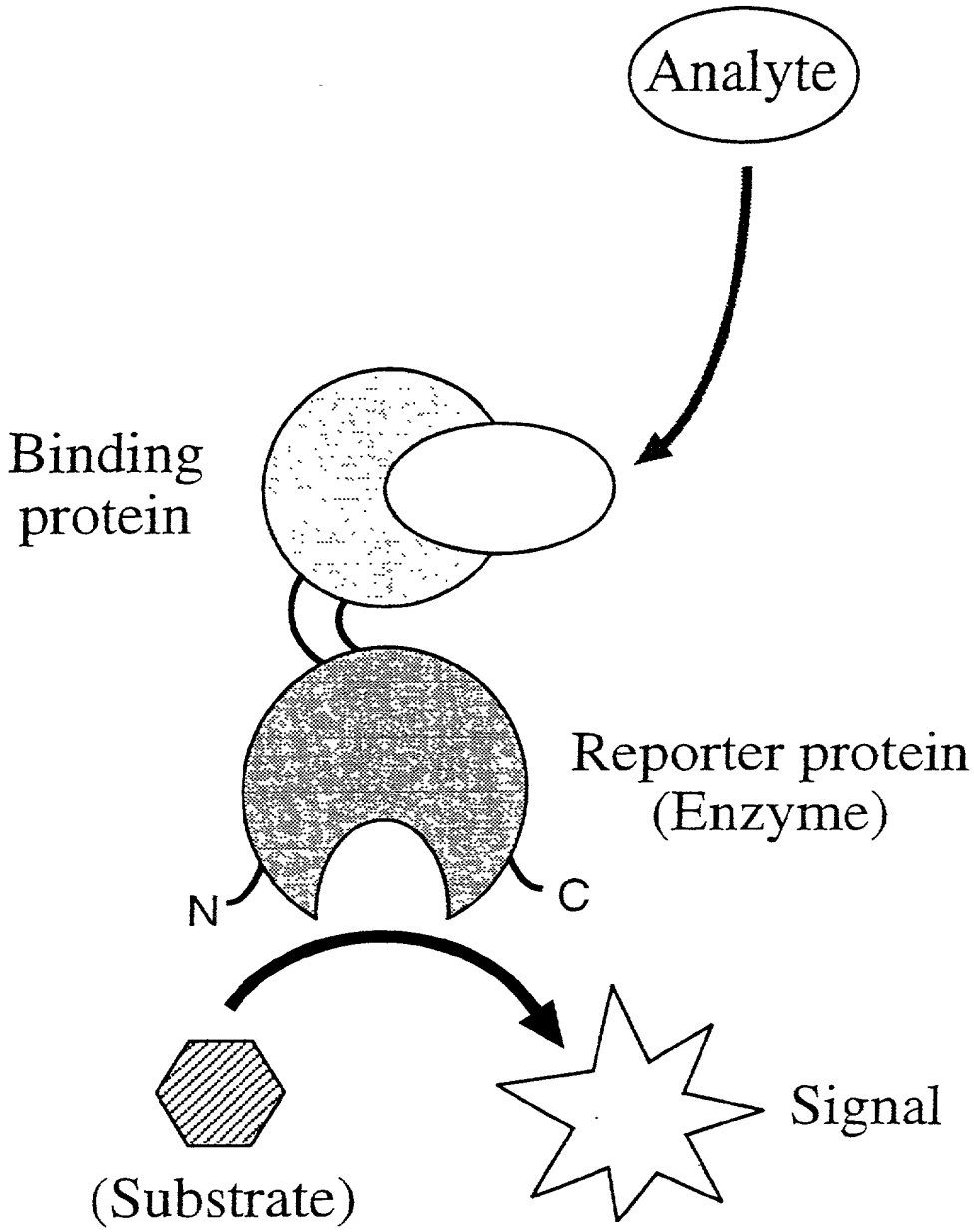

Analyte
Binding protein
Reporter protein (Enzyme)
N
C
(Substrate)
Signal

Fig.2.

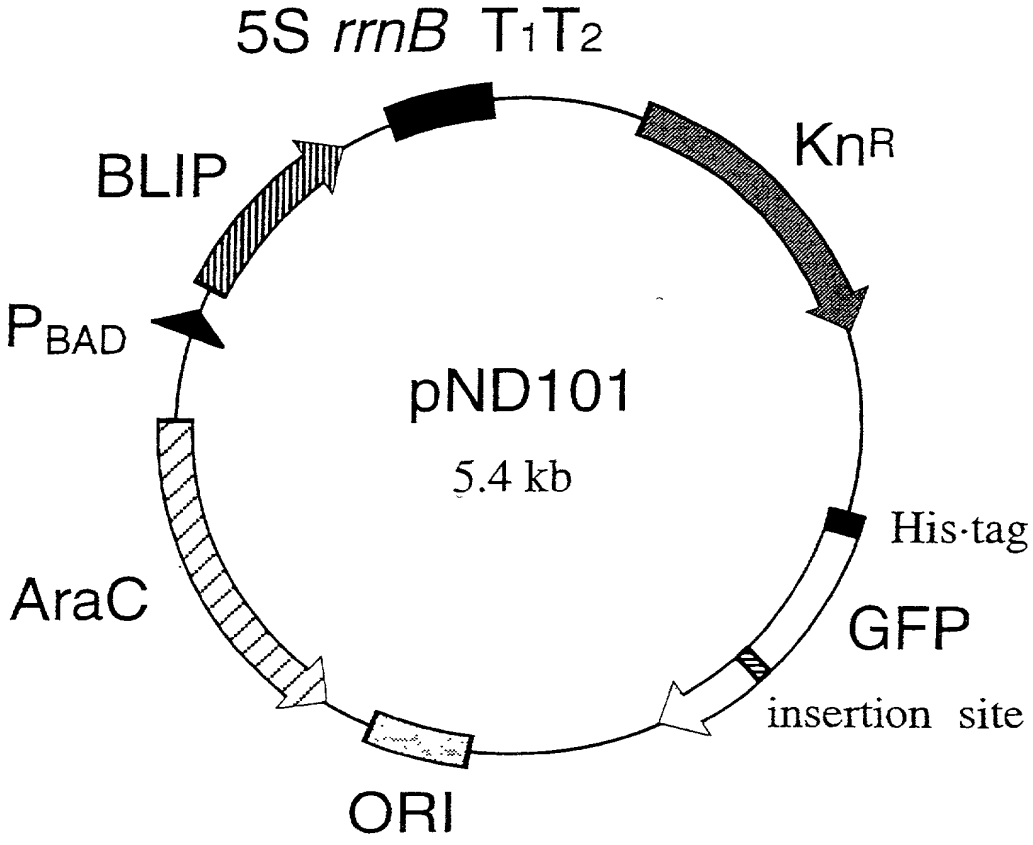

5S rrnB T1T2
KnR
BLIP
PBAD
pND101
5.4 kb
His-tag
GFP
AraC
insertion site
ORI

Fig.3.

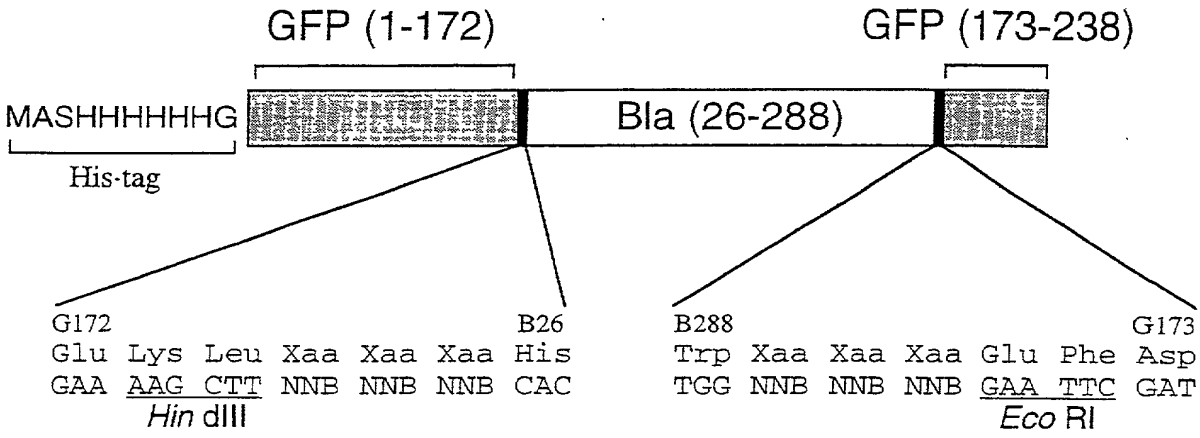

GFP (1-172)
GFP (173-238)
MASHHHHHHG
His-tag
Bla (26-288)
G172
B26
Glu Lys Leu Xaa Xaa Xaa His
GAA AAG CTT NNB NNB NNB CAC
Hin dIII
B288
G173
Trp Xaa Xaa Xaa Glu Phe Asp
TGG NNB NNB NNB GAA TTC GAT
Eco RI

Fig.4.

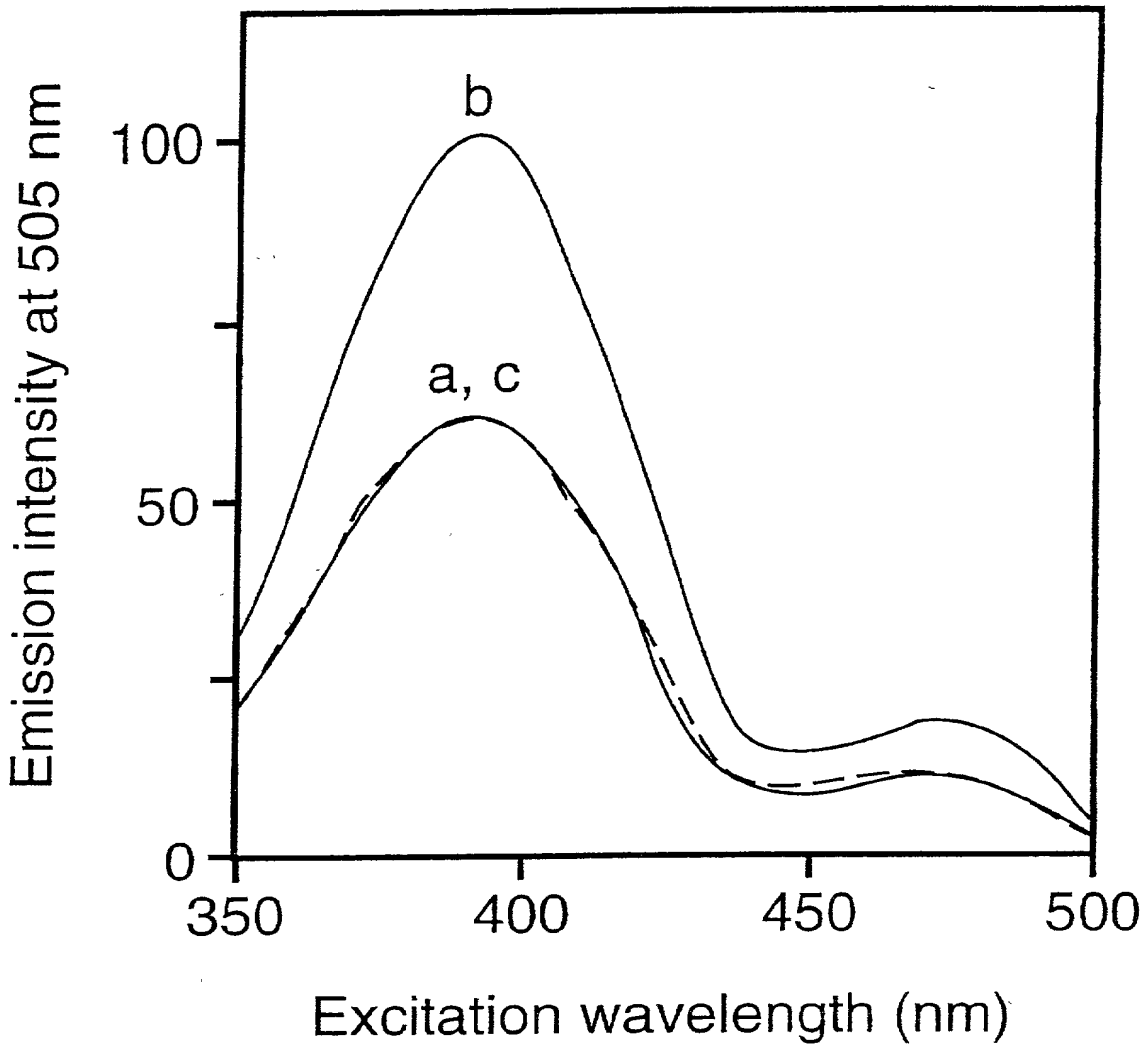

b
a, c
100
50
0
350
400
450
500
Emission intensity at 505 nm
Excitation wavelength (nm)

Fig.5.

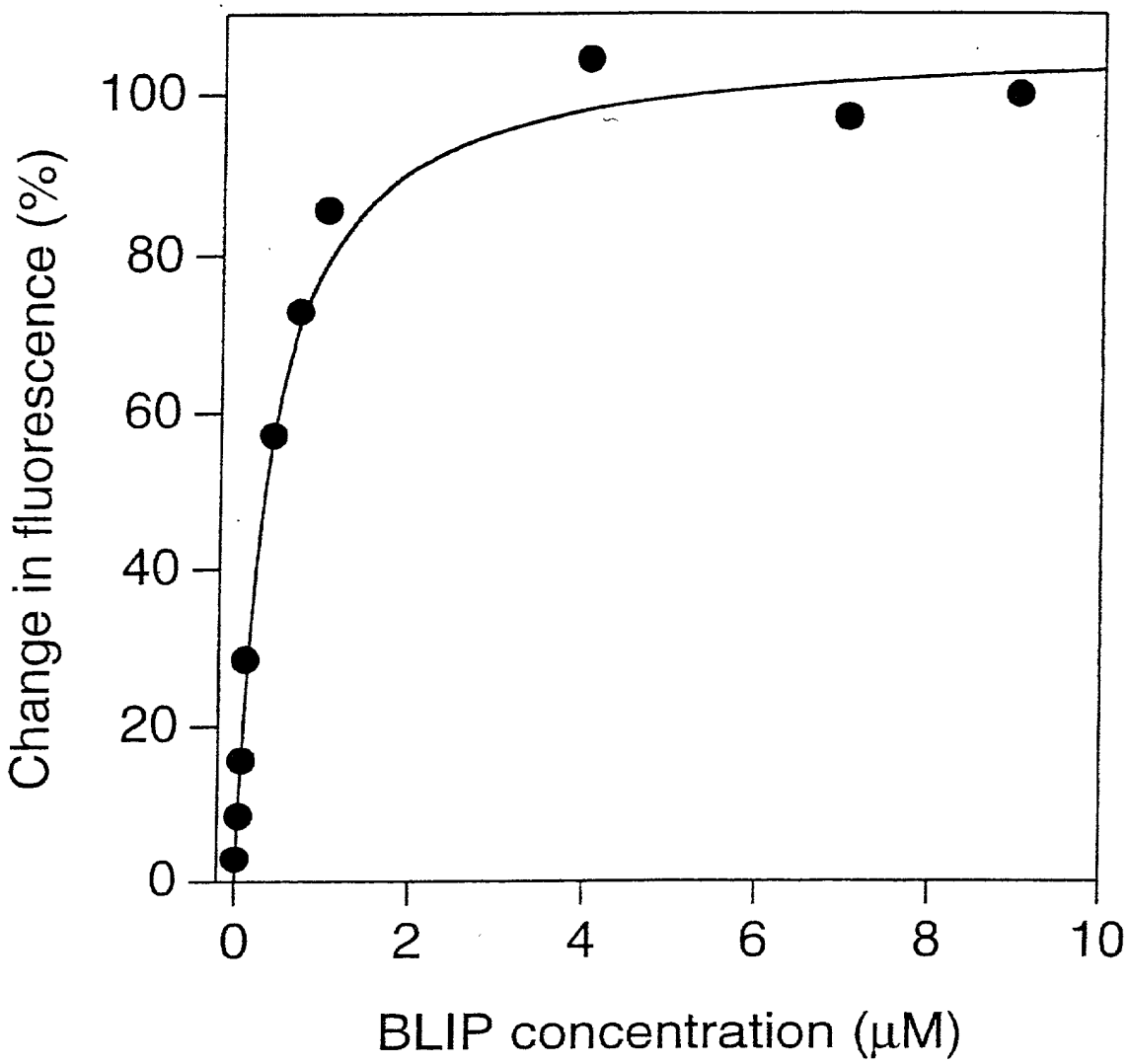

Change in fluorescence (%)
100
80
60
40
20
0
0
2
4
6
8
10
BLIP concentration (μM)

Fig.6.

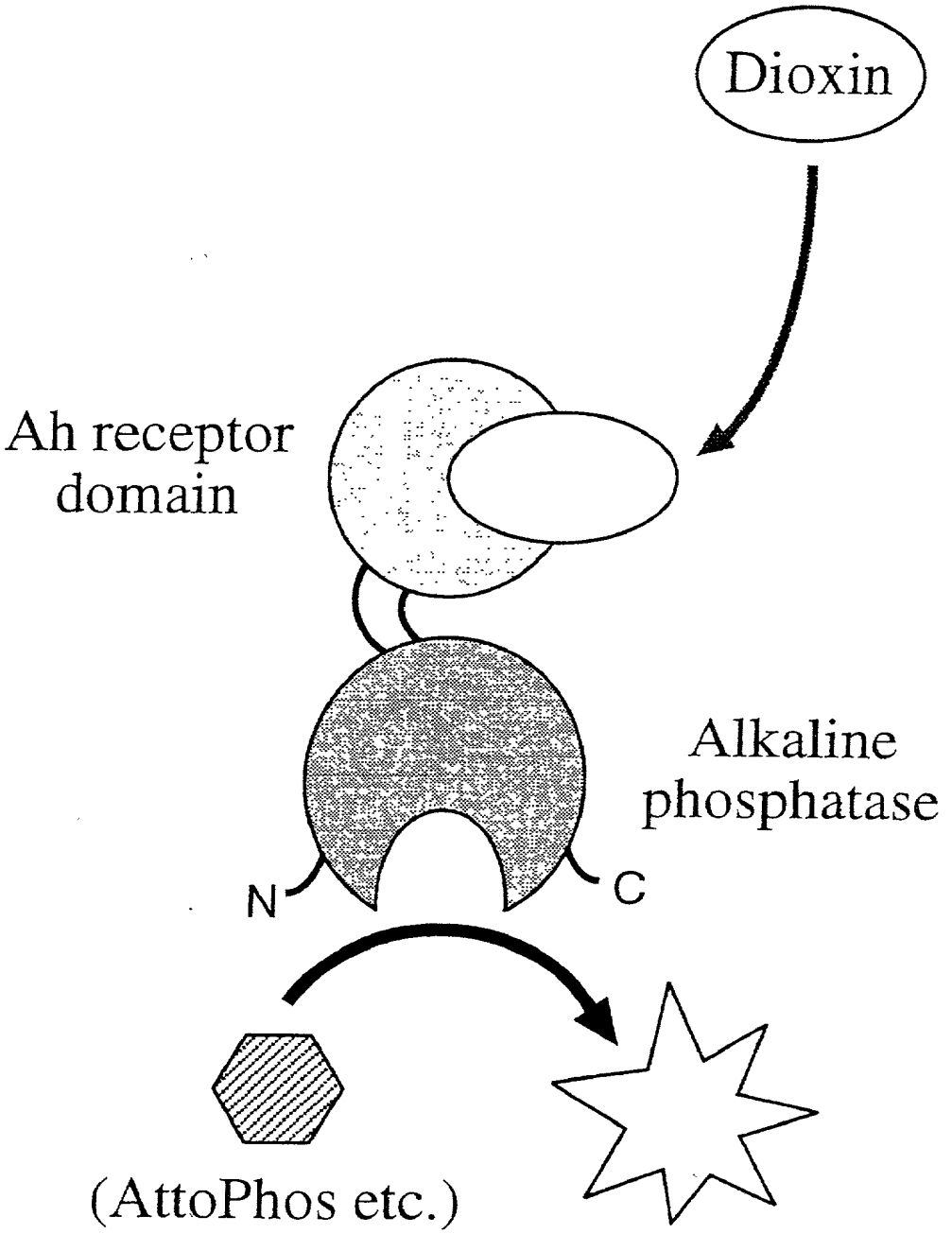

Dioxin
Ah receptor domain
Alkaline phosphatase
N
C
(AttoPhos etc.)

Fig.7.

